



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/633,566	08/05/2003	Tamon Kasajima	033211-037	7157

21839 7590 02/04/2005

BURNS DOANE SWECKER & MATHIS L L P
POST OFFICE BOX 1404
ALEXANDRIA, VA 22313-1404

EXAMINER

BLOUIN, MARK S

ART UNIT PAPER NUMBER

2653

DATE MAILED: 02/04/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/633,566	KASAJIMA ET AL.	
	Examiner	Art Unit	
	Mark Blouin	2653	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05 August 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

Detailed Action

Claim Rejections - 35 USC § 102

1. The following is a quotation of 35 U.S.C. 102(b) which forms the basis for all obviousness rejections set forth in this Office action:

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-3, 5-8, and 10 are rejected under 35 U.S.C. 102(b) as being anticipated by Goss (USPN 5,786,961).

3. Regarding Claims 1 and 6, Goss shows (Figs. 5, 8, and 9) a disk drive apparatus (Col 1, line 14) including at least one information recording disk, and at least one head arm assembly (Fig. 1) that comprises a head slider (30) having at least one head element (Col 1, line 28), a high-stiffness arm member (40) for supporting the head slider at one end section, an actuator mounted to the other end section of the arm member (Col 4, line 12), for rotationally moving the arm member in a direction substantially parallel with a surface of the information recording disk around a horizontal rotation axis of the arm member, and a resilient plate spring (80) for generating a load (Col 5, line 36) the plate spring having one end section fixed to the arm member and the other end section provided with a load point for energizing the head slider in a direction to the surface of the information recording disk.

4. Regarding Claims 2 and 7, Goss shows (Figs. 5, 8, and 9) the disk drive apparatus (Col 1, line 14) and head arm assembly (Fig. 1), wherein the head arm assembly further comprises a flexure (60) with one end section fixed to the arm member, the flexure having a resilience for determining flying attitude of the head slider.

5. Regarding Claims 3 and 8, Goss shows (Figs. 5,8, and 9) the disk drive apparatus (Col 1, line 14) and head arm assembly (Fig. 1), wherein one end of the plate spring (80) is fixed to a first surface (top) of the arm member, a second surface (bottom) of the arm member facing the recording medium surface, and wherein the one end section of the flexure is fixed to the second surface of the arm member.

6. Regarding Claims 5 and 10, Goss shows (Figs. 5,8, and 9) the disk drive apparatus (Col 1, line 14) and head arm assembly (Fig. 1), wherein the at least one head element comprises at least one thin-film magnetic head element (Col 1, line 28).

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which the subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 4 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Goss (USPN 5,786,961) in view of Hudson et al (USPN 6,229,667).

9. Regarding Claims 4 and 9, Goss shows all the features described, *supra*, but does not show bearing section located at a midpoint of the arm member, and wherein the horizontal bearing section has means for adjusting a distance between the arm member and the surface of the information recording disk.

Hudson et al shows (Fig. 4A – bearing with threads) bearing section located at a midpoint of the arm member (2), and wherein the horizontal bearing section has means for adjusting (threads) a distance between the arm member and the surface of the information recording disk.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the disk drive of Goss with the bearing section as taught by Hudson et al. The rationale is as follows: One of ordinary skill in the art at the time the invention was made would have been motivated to provide the disk drive of Goss with the bearing section as taught by Hudson et al in order to maintain the optimum flying height of the head over the disk.

Conclusion

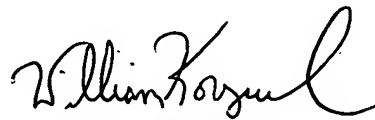
10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mark Blouin whose telephone number is (703) 305-5629. The examiner can normally be reached M-F, 6:00 am – 3:30 pm.

If attempts to reach the examiner by telephone are unsuccessful the examiner's supervisor, William Korzuch can be reached at (703) 305-6137. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9314 for regular and After Final communications.

Any inquiry of general nature or relating to the status of application or proceeding should be directed to the receptionist whose telephone number is (703) 306-0377.



Mark Blouin
Patent Examiner
Art Unit 2653
February 1, 2005



WILLIAM KORZUCH
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600